



The Carpentry Program at Harford Technical High School is one of five programs of the Construction Technologies Program, under the umbrella of the Science, Engineering, and Technology Career Cluster. Through Mr. Michael Svezese's efforts and collaboration with his colleagues, the Harford Technical High School Carpentry Program has evolved, from a program that provided "old school" techniques and skills, to a program that is on the leading edge of technology and one that incorporates business, mathematics, science, and government connections into program.

The Carpentry Program has been upgraded to go beyond a "hammer and nails" approach to one that requires students to develop academic and technical skills that will be required of the future "Green" construction industry. Harford Habitat for Humanity, a long-time partner in CTE, is collaborating with Mr. Svezese and the Construction Technologies students to design and construct another "green home" for Harford Habitat for Humanity. Students have learned first-hand the scope of the work involved, from project planning, to code compliance, to actual construction, to the final inspection of their work (this serves as the assessment tool for this type of project). The home will ultimately be moved to its permanent location during a ceremony hosted by Harford Habitat, during which students and instructors will meet the family taking ownership of the house.

Inherent in successful completion of the program are the abilities to work as part of a team, engage actively in problem-solving and critical thinking, perform trouble-shooting exercises, and apply knowledge acquired in the classroom. These experiences have translated into high program completion and graduation rates (100% in 2008 and 2009). Emphasis is placed especially on career-related mathematics, including applications of algebra and geometry. A new element of the curriculum is "green technology," which includes elements of chemistry, physics, environmental science, biology, and a strong emphasis on building codes and adherence to criteria for work to be considered in compliance with Leadership in Energy and Environmental Design (LEED) guidelines. Because these guidelines were just adopted in January 2008, Mr. Svezese had no prepared curriculum to use with his students, and as such, invested countless hours in preparing lessons that would not only teach technical skills, but that would also convey the LEED content to students.

This program is a strong example of how an instructor's vision and tireless efforts can combine with the system's goal to make high school instruction more than just "for now" and attach a strong value to preparing for the future.